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PATENT, TRADEMARK, COPYRIGHT AND RELATED INTELLECTUAL PROPERTY LAW

March 7, 2005

Mail Stop Certificate of Corrections Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: U.S. Patent No.: 6,845,217 B2
Issued: January 18, 2005
Inventor: Konishi
Our Docket: 33476US1

Sir:

A Certificate of Correction under 35 U.S.C. 254 is hereby requested to correct Patent Office printing errors in the above-identified patent. Enclosed herewith is a proposed Certificate of Correction (Form No. PTO-1050) for consideration along with appropriate documentation supporting the request for correction.

It is requested that the Certificate of Correction be completed and mailed at an early date to the undersigned attorney of record. The proposed corrections are obvious ones and do not in any way change the sense of the application.

We understand that a check is not required since the errors were on the part of the Patent and Trademark Office in printing the patent.

Very truly yours,

Jeffrey J. Sopko, Reg. No. 27676

JJS:vln
Enclosures

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Jeffrey J. Sopko
Name of Attorney for Applicant(s)

March 5, 2005
Date

Signature of Attorney

PTO/SB/44 (07-03)
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,845,217 B2 PAGE 1 OF 1
DATED : January 18, 2005
INVENTOR(S) : Konishi

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 4

Line 64, please delete "Bide" and insert therefor --side--.

Column 8

Line 52, please delete "FIG. 12(a)" and insert therefor --FIG. 12(b)--.

Column 32

Claim 17, line 52, please delete "elate" and insert therefor --plate--.

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PATENT NO. 6,845,217 B2

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shown in ~~the parts (a) and (b) of FIG. 26~~FIGS. 26(a) and 26(b) are orthogonal coordinate axes on a plane perpendicular to the axial direction of the heating element 240 shown in FIG. 25. The direction opposed to the reflection face of the infrared ray reflection plate 280 is defined as the negative direction of the x axis. In ~~the parts (a) and (b) of FIG. 26~~FIGS. 26(a) and 26(b), the origin 0 corresponds to the center axis of the heating element 240. In the graph of ~~the part (a) of~~ FIG. 26(a), the values in the radial directions represented the emission intensity of the infrared rays, and the values in the circumferential directions represented angles with respect to the center axis on the plane perpendicular to the axial direction of the heating element 240. These angles are designated by angles from the positive direction of the x axis. In ~~the part (a) of~~ FIG. 26(a), the concentric gradations indicating the emission intensity have the same values of the gradations shown in ~~the part (a) of the above-mentioned~~ FIG. 24(a). In addition, the method of measuring the emission intensity is the same as that in the case shown in ~~the part (a) of~~ FIG. 24(a).--

Please replace the paragraph beginning on page 11, line 16 and ending on page 11, line 20 with the following amended paragraph:

--As shown in ~~the part (a) of~~ FIG. 26(a), by providing the infrared ray reflection plate 280, infrared rays are

emitted intensely only on one side of the infrared ray lamp, with the positive direction of the x axis used as the center.--

Please replace the paragraph beginning on page 12, line 12 and ending on page 12, line 24 with the following amended paragraph:

--Furthermore, the emission intensity distribution obtained by providing the semi-cylindrical infrared ray reflection plate for the infrared ray lamp having the above-mentioned isotropic emission intensity distributions in all directions is substantially the same in a wide range on one side in general as shown in ~~the part (a) of~~ FIG. 26(a). For this reason, in the conventional infrared ray lamp, an attempt to increase the emission intensity in a more limited range and to decrease the intensity in other ranges in order to enhance directivity is difficult. As a result, in the case when the conventional heating apparatus is used for localized heating, the problem of low heating efficiency occurs.--

Please replace the paragraph beginning on page 21, line 19 and ending on page 21, line 22 with the following amended paragraph:

--~~part (a) of~~ FIG. 9(a) is a plan view showing an infrared ray lamp in accordance with a third embodiment of the present invention, and ~~part (b) of~~ FIG. 9(b) is a front

view thereof;--

Please replace the paragraph beginning on page 21, line 26 and ending on page 22, line 5 with the following amended paragraph:

--~~part (a) of~~ FIG. 11(a) is a graph showing the distribution curve of the intensity of the infrared rays emitted from the heating element of the third embodiment, and ~~part (b) of~~ FIG. 11(b) shows the cross section of the central portion of the infrared ray lamp of the third embodiment;--

Please replace the paragraph beginning on page 22, line 6 and ending on page 22, line 9 with the following amended paragraph:

--~~part (a) of~~ FIG. 12(a) is a plan view showing an infrared ray lamp in accordance with a fourth embodiment of the present invention, and ~~part (b) of~~ FIG. 12(b) is a front view thereof;--

Please replace the paragraph beginning on page 22, line 13 and ending on page 22, line 18 with the following amended paragraph:

--~~part (a) of~~ FIG. 14(a) is a graph showing the distribution curve of the intensity of the infrared rays emitted from the infrared ray lamp of the fourth embodiment, and ~~part (b) of~~ FIG. 14(b) shows the cross section of the central portion of the infrared ray lamp of

Claim 23 (original): A heating apparatus in accordance with claim 19, wherein the central portion of the cross section of said reflection plate is disposed so as to be opposed to the wider side portion of said heating element.

Claim 24 (original): A heating apparatus in accordance with claim 19, wherein the central portion of the cross section of said reflection plate is disposed so as to be opposed to the narrower side portion of said heating element.

Issued as claim 17

Claim 25 (currently amended): A method of producing an infrared ray lamp, comprising:

a step of forming a heating element which is formed of a carbon-based substance including at least crystallized carbon, a resistance value adjustment substance and amorphous carbon into a substantially plate shape, the width of which is larger than its thickness by five times or more,

a step of disposing a lead wire having a spring portion which pulls said heating element at a predetermined tension,

~~a step of forming a glass tube by forming glass into a substantially cylindrical shape,~~

a step of hermetically sealing ~~a substantially plate~~

said heating element~~, the width of which is larger than its thickness by five times or more,~~ inside said glass tube so that the center line of said heating element in the longitudinal direction thereof is substantially coaxial with the center axis of said glass tube, and

a step of forming a reflection film for reflecting infrared rays into a substantially semi-cylindrical shape on the external face of the cylindrical shape of said glass tube so as to substantially include the range of the disposition of said heating element in the axial direction thereof.

Claim 26 (currently amended): A method of producing an infrared ray lamp, comprising:

a step of forming a heating element which is formed of a carbon-based substance including at least crystallized carbon, a resistance value adjustment substance and amorphous carbon into a substantially plate shape, the width of which is larger than its thickness by five times or more,

~~a step of forming a glass tube by forming glass into a substantially cylindrical shape,~~

a step of forming a reflection film for reflecting infrared rays into a predetermined substantially semi-cylindrical shape on the external face or the internal face of the cylindrical shape of said glass